



**Department of
Environmental Protection
Bureau of Land & Water Quality May 2004
O&M Newsletter**

A monthly newsletter for wastewater discharge licensees, treatment facility operators, and associated persons

RECORDS AND RECORDKEEPING

This is the fourth in a series of articles that will run for the entire year and will ultimately cover all of the “STANDARD CONDITIONS” found in all permits. The articles will refer to the current set of Standard Conditions, but will apply similarly to previous versions and editions; they’ve always copied or closely tracked DEP and EPA regulations. Regardless of when your permit was issued, you need to dig out the Standard Conditions (a separate, apparently generic attachment to your “SPECIAL CONDITIONS”) and review them. If you’re like a lot of other treatment facility owners or operators, this may be your first time! It may seem like pretty dull, “boilerplate” stuff, but the Standard Conditions are important to assuring that your treatment facility is in full compliance with its permit and all applicable laws and statutes. The complete list of Standard Conditions may be found on line at:

<http://www.state.me.us/dep/blwq/docstand/wastepage.htm#gen>

A. GENERAL PROVISIONS

9. Confidentiality of records. *38 MRSA section 414(6) reads as follows. “Any records, reports or information obtained under this subchapter is available to the public, except that upon a showing satisfactory to the department by any person that any records, reports, or information, or particular part of any record, report or information, other than the names and addresses of applicants, license applications, licenses, and effluent data, to which the department has access under this subchapter would, if made public, divulge methods or processes that are entitled to protection as trade secrets, these records, reports or information must be confidential and not available for public inspection or examination. Any records, reports or information may be disclosed to employees or authorized representatives of the State or the United States concerned with carrying out this subchapter or any applicable federal law, and to any party to a hearing held under this section on terms the commissioner may prescribe in order to protect these confidential records, reports and information, as long as this disclosure is material and relevant to any issue under consideration by the department.”*

This provision of the law is saying that the information you submit to the DEP throughout the life of your license, such as the application itself, your effluent data, ambient monitoring data and the like, is all considered “public” information. All citizens, including local residents, the media, interest groups, and business competitors, have the right to ask the DEP for such public information, and the DEP is legally obligated to provide it to them. Information considered proprietary or a trade secret may be submitted with a claim of confidentiality. If the public subsequently requests such information, the person submitting it will be contacted by the DEP. There are some types of “trade secret” information that can be legally held confidential upon showing by the licensee.

C. MONITORING AND RECORDS

3. Monitoring and records.

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.*
- (b) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring information, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.*
- (c) Records of monitoring information shall include:*
 - (i) The date, exact place, and time of sampling or measurements;*
 - (ii) The individual(s) who performed the sampling or measurements;*
 - (iii) The date(s) analyses were performed;*
 - (iv) The individual(s) who performed the analyses;*
 - (v) The analytical techniques or methods used; and*
 - (vi) The results of such analyses.*
- (d) Monitoring results must be conducted according to test procedures approved under 40 CFR part 136, unless other test procedures have been specified in the permit.*
- (e) State law provides that any person who tampers with or renders inaccurate any monitoring devices or method required by any provision of law, or any order, rule license, permit approval or decision is subject to the penalties set forth in 38 MRSA, Section 349.*

This is pretty straight forward, but a few points deserve emphasis. “Representative” in this case means testing or sampling that reflects the accurate, daily content of the effluent. Sampling representative of the monitored activity for continuous and relatively homogenous processes may be more challenging than it first appears. Additionally, some careful analysis may be required when specifying (at the discretion of the DEP) a sampling regime for seasonal, cyclical, episodic, or batch processes (look for more on representative sampling in our September article). Paragraph 3(b) specifies a required 3 year record retention period (5 years for sludge); you may retain records for as long as you want, and it's a good idea to do so for the duration of one licensing cycle (at least 5 years), or until your next permit renewal and issuance. Industrial dischargers should check their corporate records-retention policy if they are thinking about extended retention. You must use the test procedures (specified in your license) approved under 40 CFR part 136. The testing labs you use must also use these approved procedures. Other procedures may be approved by the DEP and specified in your permit. Your sampling and analysis records, including QA/QC information, are an important part of your compliance documentation, as is your Quality Assurance Performance Plan.

D. REPORTING REQUIREMENTS

2. **Signatory Requirement.** *All applications, reports, or information submitted to the Department shall be signed and certified as required by chapter 521, Section 5 of the Department's rules. State law provides that any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained by any order, rule, permit, approval or decision of the Board or Commissioner is subject to the penalties set forth in 38 MRSA, Section 349.*

It is important that whoever is signing reports and letters be familiar with their contents! That person needs to read thoroughly and understand what it is they are signing. These are important legal documents describing compliance with State and Federal laws; they are part of the legal record, and may become evidence in civil or criminal court cases. The signatory is personally responsible for the documents' accuracy and veracity, and can be held individually accountable by regulatory agencies and the court.

So who needs to sign? If you're a corporation, it's a "responsible corporate officer". This may be a facility manager (if he or she is a duly authorized representative), if the facility employs more than 250 people or has gross annual sales or expenses of \$25MM or more, and is geographically distant from corporate headquarters. For a partnership or sole proprietorship, it's a general partner or sole proprietor. For a municipality, or State, Federal, or other public agency, it's the principal executive officer or ranking elected official, or a duly authorized representative.

To be a duly authorized representative, the authorization must 1), be in writing, from the appropriate authority, 2), it must specify a person or a position, and 3), it must be submitted to the DEP. Whenever there is a change in authorization, it must be submitted to the DEP in writing prior to or with anything signed by the new designee. Section 5(d) contains a specific declaration that must be submitted as part of the certification.

38 MRSA, Section 349 (Falsification and tampering) provides for fines of up to \$10,000, imprisonment for up to six months, or both.

3. **Availability of reports.** *Except for data determined to be confidential under A(9), above, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by state law, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal sanctions as provided by law.*

In addition to the public availability discussed above, PCS data are available on the Federal ECHO database. Additionally, The DEP holds the paper records, such as DMRs, in our offices. Again, interest groups, the media, and interested citizens routinely review facility performance through DEP and Federal records.

As always, if you have any questions or concerns regarding your license or any other water compliance issues, contact your facility Inspector. He or she will be able to work with you, or direct you to the appropriate Departmental resources.

All water quality laws and regulations can be accessed at: <http://www.maine.gov/dep/envIRONlrr.htm>

Approved Training

May 4&5, 2004 in Augusta, ME - Activated Sludge - Sponsored by Northeast Water & Wastewater Training Associates and Life Safety Specialists (207)-934-4802 or (207)-744-0135 – Approved for 9 hours

May 4, 2004 in York, ME - Fall Protection - Sponsored by Northeast Water & Wastewater Training Associates and Life Safety Specialists (207)-934-4802 or (207)-744-0135 – Approved for 4 hours

May 4, 2004 in Gardiner, ME – LockOut/TagOut, Low Voltage Electrical Safety & Fall Protection - Sponsored by MRWA – 729-6569 – Approved for 5.5 hours

May 5, 2004 in York, ME – LockOut/ TagOut, Low Voltage Electrical Safety & Fall Protection - Sponsored by MRWA – 729-6569 – Approved for 5.5 hours

May 6, 2004 in Norway, ME – LockOut/ TagOut, Low Voltage Electrical Safety & Fall Protection - Sponsored by MRWA – 729-6569 – Approved for 5.5 hours

May 6, 2004 in Waterville, ME - Applied Wastewater Math - Sponsored by Northeast Water & Wastewater Training Associates and Life Safety Specialists (207)-934-4802 or (207)-744-0135 – Approved for 5 hours

May 10, 2004 in Hallowell, ME - Operation, Troubleshooting, & Upgrade of Municipal and Industrial Lagoons *with Dr. Michael Richard* - Sponsored by JETCC, (207) 253-8020 – Approved for 6 hours.

May 11, 2004 in Hallowell, ME - Identification of Filamentous Organisms in Activated sludge *with Dr. Michael Richard* - Sponsored by JETCC, (207) 253-8020 – Approved for 6 hours.

May 18, 2004 in Augusta, ME – GASB 34 and Internal Controls - Sponsored by MRWA – 729-6569 – Approved for 3 hours

May 20, 2004 in Livermore Falls, ME - Residuals Management & Storage Options with Proven Beneficial Uses for Biosolids (*followed by a round of golf*) - Sponsored by JETCC, (207) 253-8020 – Approved for 6 hours.

May 20, 2004 in Bangor, ME – GASB 34 and Internal Controls - Sponsored by MRWA – 729-6569 – Approved for 3 hours

May 20, 2004 in Brunswick, ME – Understanding Comp Time - Sponsored by MRWA– 729-6569 – Approved for 2.5 hours

June 10, 2004 in Bangor, ME – Understanding Comp Time - Sponsored by MRWA– 729-6569 – Approved for 2.5 hours

June 24, 2004 in Dover-Foxcroft, ME – Lagoon Day - Sponsored by MRWA – 729-6569 – Approved for 5 hours

May 25, 2004 in Togus, ME - Fall Protection - Sponsored by Northeast Water & Wastewater Training Associates and Life Safety Specialists (207)-934-4802 or (207)-744-0135 – Approved for 4 hours

May 18, 2004 in Augusta, ME – GASB 34 and Internal Controls - Sponsored by MRWA – 729-6569 – Approved for 3 hours

August 11, 2004 in Portland ME – Activated Sludge – Sponsored by Penn State Univ. – 814-863-6106 – Approved for 6 hours

August 12, 2004 in Portland ME – biological Nutrient Removal – Sponsored by Penn State Univ. – 814-863-6106 – Approved for 6 hours

For Practice

1. The purpose of an air-gap device is to:
 - a. Put more oxygen in the waste in sewers to avoid odors
 - b. Lessen vibration in pipes.
 - c. Prevent cross connections between wastewater and potable water.
 - d. Ventilate wet wells at pump stations

2. A BOD test was run using three dilutions of the same sample. Which dilution gives the most valid results?

	Sample Volume	Initial DO	Final DO	BOD
a.	3 mL	8.0 mg/L	6.7 mg/L	130 mg/L
b.	5 mL	7.9 mg/L	4.0 mg/L	234 mg/L
c.	8 mL	8.1 mg/L	0.9 mg/L	270 mg/L

3. If the return sludge rate does not change, the influent flow increases and the influent BOD concentration remains constant, the F/M ratio in the aeration basin will most likely...
 - a. Remain the same
 - b. Increase
 - c. Decrease
 - d. Depend on the air temperature
4. If an operator has a stock solution of acid that is 10N and he mixes 200 mL of that acid with 800 mL of distilled water, what will the normality of the resulting solution be?
 - a. 0.8N
 - b. 0.2N
 - c. 8.0N
 - d. 2.0N

Certification News

The Spring wastewater operator certification exam was given on May 12, 2004 in the usual locations. Results will be sent to those who took the test as soon as we have them. Applications for the November 10, 2004 exam must be postmarked by September 25, 2004 or hand-delivered to the DEP Augusta office on September 27, 2004

Answers to *For Practice*:

1. c. An air-gap is the only acceptable method to prevent cross-connections between wastewater and potable water.
2. b. In sample A, the depletion of DO in the sample bottle is less than 2.0 mg/L indicating that there was not enough biological activity for a valid test. In sample C, the DO was depleted to less than 1.0 mg/L. There might not have been enough DO available to complete the biological reduction of the organic material in the wastewater.
3. b. The F/M ratio is the ratio of the pounds of food to the pounds of microorganisms. If more flow having the same BOD concentration comes into the plant, the plant will receive more pounds of BOD. If the return sludge rate remains constant, there will be more food for the same amount of sludge. Thus, the F/M ratio increases
4. d. The normality of the final solution is given by (Volume of Acid X Normality of Acid)/Total Volume

$$\text{Normality of Solution} = (200 \text{ mL} \times 10\text{N}) / (200\text{mL} + 800\text{mL}) = 2.0\text{N}$$



Wastewater Laboratory Quality Assurance/Quality Control



Tuesday, June 1, 2004
Jeff's Catering
Brewer, Maine

Wednesday, June 2, 2004
Presque Isle Inn & Convention Center
Presque Isle, Maine

Thursday, June 10, 2004
Cohen Community Center
Hallowell, Maine

Friday, June 11, 2004
Holiday Inn Express
Saco, Maine

Registration 8:00 - 8:30

Course Hours 8:30 - 4:00

Program Cost \$30

Lunch is sponsored by Katahdin Analytical Services

Whether you oversee your own sampling and analytical laboratory procedures or rely upon a contracted laboratory, your licensed wastewater treatment facility is responsible for the accuracy, validity and completeness of all data and other information submitted to Maine Department of Environmental Protection. The Department then relies upon your data to assess environmental conditions and to make regulatory decisions.

In April 2003, the Maine DEP announced new *Performance Standards* for all laboratory activities performed by licensed wastewater treatment facilities, and also for the laboratories with which they are contracted. The purpose of these standards is to assure the quality and defensibility of the environmental data as reported.

Still, many facilities facing these standards are challenged with:

- ~~✍~~ Where to begin?
- ~~✍~~ Exactly what is Quality Assurance/Quality Control?
- ~~✍~~ How to determine Sample Collection and Handling procedures
- ~~✍~~ How to set up a written QA/QC plan
- ~~✍~~ How to establish Standard Operating Procedures
- ~~✍~~ Which standard protocols to adopt, and which to customize by facility or process

On behalf of Maine DEP and JETCC, **Katahdin Analytical Services** will present four training sessions to help Maine's facilities meet these standards. **These sessions will offer step by step tools to aid operators of both large and small facilities in developing QA/QC plans and establishing SOPs.**

Through participation in this training, you will benefit from detailed explanations, with procedural demonstrations of wastewater chemistries.

You will also receive:

- ~~✍~~ A model QA/QC plan to customize for your facility
- ~~✍~~ Sample bench sheets
- ~~✍~~ QC checklists
- ~~✍~~ The recently updated Laboratory SOP Manual from Maine Wastewater Control Association

***Funds to subsidize the training were donated to JETCC from Domtar Industries of Baileyville, Maine. These funds were provided through a consent agreement between Domtar Industries and the State of Maine.*

CREDITS: 6 Training Contact Hours

For More Information, contact JETCC at (207) 253-8020 or by Email at JETCC@maine.rr.Com